UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,418	03/30/2004	Craig A. Hobbs	60001.0306US01/MS305255.1	5641

7590 09/19/2007	EXAMINER
Christopher J. Leonard Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903	NGUYEN, MAIKHANH

ART UNIT	PAPER NUMBER
2176	

MAIL DATE	DELIVERY MODE
09/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/813,418	HOBBS, CRAIG A.
	Examiner	Art Unit	
	Maikhanh Nguyen	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 July 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>11-22 and 24-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>11-22 and 24-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the Amendment filed 07/05/2007 to the original application

filed 03/30/2004.

Claims 11-22 and 24-33 are presented for examination. Claims 1-10 and 23 have been

canceled. Claims 24-33 have been added. Claim 1 has been amended. Claims 11, 24,

and 29 are independent claims.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to a
person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.*

*This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a),
the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions
covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37
CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later
invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35
U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).*

Claims 11-22 and 24-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cahill et al. (US 20020091871, publication date: July 11, 2002).

As to claim 11:

Cahill teaches a method of formulaically specifying the redirection or modification of a

formula in a spreadsheet application at formula set-time a spreadsheet object, comprising:

- setting a spreadsheet formula to a first spreadsheet cell *[e.g., a formula has been*

  stored in cell A] (see ¶¶ 0033, 0036 ,0037, 0042, 0043, 0048 and see also, fig.3);

- in response to setting the spreadsheet formula to the first spreadsheet cell,

  obtaining a formula previously set to the spreadsheet cell *[e.g., an object can be*

  embedded (stored) in a cell of a spreadsheet component. Once the object has

  been embedded in the spreadsheet, a spreadsheet user can write formulas

  against the object, thereby invoking the object. This embedding is made possible

  by the expansion of the spreadsheet component's data types to include an

  "object" data type] (see ¶¶ 0030-0033);

- identifying a cell reference to a second spreadsheet cell in, among other things,

  the spreadsheet formula get to the first spreadsheet cell *[e.g., cell C1 contains*

  the formula "=OBJECT(A1).LastPrice(B1)". Cell C1, thus, refers to the object

  embedded in cell A1. The syntax of the OBJECT function enables the OBJECT

  function to refer to a particular property of the object. In the example of cell C1,

the OBJECT function refers to the "LastPrice" property of the object in A1. As described above, the object in cell A1 is the marketdata object. Thus, the LastPrice property of the marketdata object can be determined and stored in cell C1] (see ¶ 0042).

- in response to setting the spreadsheet formula to the first spreadsheet cell, determining whether data associated with the first spreadsheet cell should be redirected to a second spreadsheet cell identified by the cell reference *[e.g., the formula of cell C1 invokes the object in cell B1 and determines the LastPrice property for that object. This action effectively returns the LastPrice for the property identifier in B1. In this example, the last stock price for the MSFT stock is retrieved from the object marketdata and stored in cell C1 ... Each parenthetical property identifier in cells C2-C5 contain references to corresponding cells in column B] (see ¶¶ 0043 and 0052-0054).*

Cahill, however, does not specifically teach the redirecting step as claimed. However, Cahill teaches *"spreadsheet cell A1 contains the object formula "=CREATEOBJECT (progid, servername)". The CREATEOBJECT function can be used to embed an object in the spreadsheet object 306. The parser component 302 of an exemplary embodiment of the present invention is configured to read the CREATEOBJECT function. In the embodiment of the CREATEOBJECT function used in the formula stored in cell A1 of the spreadsheet object 306, two arguments are used to identify the location of the*

external object of which the embedded object will be an instance. Of course, other

arguments could be used to identify an external object to embed an object in a

spreadsheet object" (see ¶ 0036).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to have applied Cahill's teachings to include the claimed *"redirecting data*

associated with the first spreadsheet cell to the second spreadsheet cell for entry into the

second spreadsheet cell when data associated with the first spreadsheet cell is

redirected to the second spreadsheet cell identified by the cell reference" because it

would have allowed the user to directly call functions from objects that are installed on

a local or remote machine by integrating an object function within a spreadsheet

formula and provided the user with a tool for integrating outside data services into a

spreadsheet and may take advantage of pre-existing objects.

As to claim 12:

Cahill teaches prior to obtaining a formula previously set to the first spreadsheet cell,

parsing the spreadsheet formula set to the first spreadsheet cell to determine any required

evaluation or recalculation caused by the spreadsheet formula set to the first spreadsheet

cell *[e.g., The spreadsheet component 300 can include a parser component 302 and a*

recalculation component 304. The parser component 302 examines the contents of each

cell in the spreadsheet object 306. The parser component 302 examines every aspect of

the formula (or data) to verify its syntax. The parser component 302 includes a function

library 320 and compares each function in each formula of the spreadsheet object 306 to

the function library 320 to verify the function's syntax ... determine whether the function

is a valid spreadsheet function ... by recalculating the values stored in the cells of the

spreadsheet object] (see ¶¶ 0032-0037).

As to claim 13:

Cahill teaches a value to be evaluated by the formula previously set to the first

spreadsheet cell *[e.g., Spreadsheet object 508 is simply the graphical representation of*

spreadsheet object 506 as it would appear to a user after the formula of cell A1 has been

evaluated. The value property of TextBox1, "tractor sale" has been returned and is

displayed in cell A1 of the spreadsheet object 508] (see ¶¶ 0046).

As to claim 14:

Cahill teaches determining a cell reference for a second spreadsheet cell from the

spreadsheet formula set to the first spreadsheet cell *[e.g., In the example of FIG. 4, cell*

C1 contains the formula "=OBJECT(A1).LastPrice(B1)". Cell C1, thus, refers to the

object embedded in cell A1. The syntax of the OBJECT function enables the OBJECT

function to refer to a particular property of the object. In the example of cell C1, the

OBJECT function refers to the "LastPrice" property of the object in A1 ... Object

properties can be more specifically identified by using a parenthetical property identifier.

In the example of cell C1, the LastPrice property is more specifically identified by the

parenthetical property identifier "B1". The property identifier "B1" refers to cell B1 of

the spreadsheet object 400. Thus, the formula of cell C1 invokes the object in cell B1 and

determines the LastPrice property for that object. This action effectively returns the

LastPrice for the property identifier in B1. In this example, the last stock price for the

MSFT stock is retrieved from the object marketdata and stored in cell C1] (see ¶¶ 0042

and 0043).

As to claim 15:

Cahill teaches if no cell reference for a second spreadsheet cell is determined from the

spreadsheet formula set to the first spreadsheet cell, determining a cell reference for the

second spreadsheet cell from the spreadsheet formula previously set to the first

spreadsheet cell *(see ¶¶ 0043 and 0052-0054).*

As to claim 16:

Cahill teaches redirecting data associated with the first spreadsheet cell to the second

spreadsheet cell includes redirecting data associated with the first spreadsheet cell to the

second spreadsheet cell for evaluation by a spreadsheet formula set to the second

spreadsheet cell *[e.g., spreadsheet cell A1 contains the object formula*

"=CREATEOBJECT (progid, servername)". The CREATEOBJECT function can be used

to embed an object in the spreadsheet object 306. The parser component 302 of an

exemplary embodiment of the present invention is configured to read the

CREATEOBJECT function. In the embodiment of the CREATEOBJECT function used in

the formula stored in cell A1 of the spreadsheet object 306, two arguments are used to

identify the location of the external object of which the embedded object will be an

instance. Of course, other arguments could be used to identify an external object to

embed an object in a spreadsheet object] (see ¶ 0036).

As to claim 17:

Cahill teaches redirecting data associated with the first spreadsheet cell to the second

spreadsheet cell for entry into the second spreadsheet cell includes redirecting data

associated with the first spreadsheet cell to the second spreadsheet cell for modifying a

spreadsheet formula set to the second spreadsheet cell [e.g., *spreadsheet cell A1 contains*

the object formula "=CREATEOBJECT (progid, servername)". The CREATEOBJECT

function can be used to embed an object in the spreadsheet object 306. The parser

component 302 of an exemplary embodiment of the present invention is configured to

read the CREATEOBJECT function. In the embodiment of the CREATEOBJECT function

used in the formula stored in cell A1 of the spreadsheet object 306, two arguments are

used to identify the location of the external object of which the embedded object will be

an instance. Of course, other arguments could be used to identify an external object to

embed an object in a spreadsheet object] (see ¶ 0036).

As to claim 18:

Cahill teaches if data associated with the first spreadsheet should be redirected to the

second spreadsheet cell, determining whether the spreadsheet formula previously set to

the first spreadsheet cell requires evaluation in response to the spreadsheet formula set to

the spreadsheet cell *[e.g., spreadsheet cell A1 contains the object formula*

"=CREATEOBJECT (progid, servername)". The CREATEOBJECT function can be used

to embed an object in the spreadsheet object 306. The parser component 302 of an

exemplary embodiment of the present invention is configured to read the

CREATEOBJECT function. In the embodiment of the CREATEOBJECT function used in

the formula stored in cell A1 of the spreadsheet object 306, two arguments are used to

identify the location of the external object of which the embedded object will be an

instance. Of course, other arguments could be used to identify an external object to

embed an object in a spreadsheet object] (see ¶ 0036).

As to claim 19:

Cahill teaches evaluating the spreadsheet formula previously set to the first spreadsheet

cell in response to the spreadsheet formula set to the first spreadsheet cell *(see ¶¶ 0033,*

0035 and 0046).

As to claim 20:

Cahill teaches passing an evaluated result of evaluating the spreadsheet formula

previously set to the first spreadsheet cell to the second spreadsheet cell *(see ¶¶ 0033,*

0035 and 0046).

As to claim 21:

Cahill teaches passing the evaluated result of evaluating the spreadsheet formula

previously set to the first spreadsheet cell for evaluation by a spreadsheet formula set to

the second spreadsheet cell *(see ¶¶ 0033, 0035 and 0046).*

As to claim 22:

Cahill teaches passing the evaluated result of evaluating the spreadsheet formula

previously set to the first spreadsheet cell for modifying a spreadsheet formula set to the

second spreadsheet cell *(see ¶¶ 0033, 0035 and 0046).*

As to claims 24-28:

Note the rejection of claims 11-15 above. Claims 24-28 are the same as claims 11-15,

except claims 24-28 are computer-readable storage medium claims and claims 11-15 are

method claims.

As to claims 29-33:

Note the rejection of claims 11-15 above. Claims 29-33 are the same as claims 11-15,

except claims 29-33 are system claims and claims 11-15 are method claims.

Response to Arguments

3.   Applicant's arguments filed on 07/05/2007 have been fully considered but are deemed to

be moot in view of the new grounds of rejection necessitated by Applicant's amendments.

Conclusion

4.   The prior art made of record, listed on PTO 892 provided to Applicant is considered to

have relevancy to the claimed invention. Applicant should review each identified

reference carefully before responding to this office action to properly advance the case in

light of the prior art.

5.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded

of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.
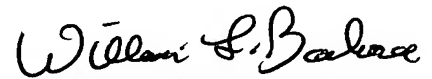
Contact information

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-

4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30

pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Doug Hutton can be reached at (571) 272-4137.

The fax phone number for the organization where this application or proceeding is assigned is
571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information
Retrieval (PAIR) system. Status information for published applications may be obtained from either
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9197 (toll-free).

Any response to this action should be mailed to:
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